

**IN THE UNITED STATES PATENT AND
TRADEMARK OFFICE**

In re application of:
TIMOTHY W. WOMER et al.

) Patent Application
)
) **ENHANCED THERMAL CONDUCTION**
) **FOR PLASTICATING RESINOUS**
) **MATERIAL**
)

Attorney Docket No.: 3522.26

INFORMATION DISCLOSURE STATEMENT

McLaughlin & McNally
500 City Centre One
P.O. Box 507
Youngstown, Ohio 44501-0507

February 20th, 2004

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In accordance with the Applicants' duty of good faith and candor toward the Patent Office, the following material is brought to the attention of the Examiner as possibly being of interest in connection with the above-identified patent application. These references were brought to the attention of Applicants and are being submitted herewith to comply with the Duty of Disclosure. Consideration of the listed documents by Examiner is respectfully requested pursuant to the provisions of MPEP 609. Applicants respectfully requests that a copy of PTO/SB/8A, as considered and initialed by the Examiner, be returned to the undersigned with the next official communication.

Attorney Docket No. 3522.26

Applicants, by submitting the listed documents, do not represent the documents to be prior art to this application, and reserves the right, pursuant to 37 C.F.R. Section 1.131 or otherwise, to establish otherwise. Applicants do not represent that all of the listed documents are material to the examination of this application, but have cited same to make it clear beyond all doubt that the Duty of Disclosure has been complied with. Moreover, Applicants do not represent that they have reviewed in detail the enclosed documents. There may be details disclosed in these documents of which Applicants are not aware.

UNITED STATES PATENTS

<u>PATENT NO.</u>	<u>PATENTEE</u>	<u>ISSUE DATE</u>
6,486,432	Colby, et al.	11/26/02
5,565,277	Cox, et al.	10/15/96
5,363,900	Betz	11/15/94
5,246,056	Lomax, et al.	09/21/93
5,221,821	Burns, et al.	06/22/93
5,023,145	Lomax, et al.	06/11/91
4,966,544	Mitake	10/30/90
4,399,198	Lomax, et al.	08/16/83
4,103,800	Lomax, et al.	08/01/78
3,913,660	Dietz	Diez

OTHER PRIOR ART–NON PATENT LITERATURE DOCUMENTS

PAYTON R. LEWIS, "New Tooling Takes a Beating, Transfer Heating," *Injection Molding*, May 2002, 51-52, United States

PAYTON R. LEWIS, "Composite Metal Technology," Technical Paper, presented in Chicago, Illinois, at Regional Technical of the Society of Plastic Engineers, March 20, 2002

CONCLUSION

The Examiner is respectfully requested to consider each of the above-discussed references during prosecution of the above-discussed application for patent.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	
				Filing Date	
				First Named Inventor	
				Art Unit	
				Timothy W. Womer, et al.	
				Examiner Name	
Sheet	1	of	2	Attorney Docket Number	
				3522.26	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US-6,486,432	11/26/02	Colby, et al.	
		US-5,565,277	10/15/96	Cox, et al.	
		US-5,363,900	11/15/94	Betz	
		US-5,246,056	9/21/93	Lomax, et al.	
		US-5,221,821	6/22/93	Burns, et al.	
		US-5,023,145	6/11/91	Lomax, et al.	
		US-4,966,544	10/30/90	Mitake	
		US-4,399,198	8/16/83	Lomax, et al.	
		US-4,103,800	8/1/78	Lomax, et al.	
		US-3,913,660	10/21/75	Diez	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	-Number ⁴	-Kind Code ⁵ (if known)				

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.
¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.
³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.
Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number		
			Filing Date		
			First Named Inventor	Timothy W. Womer, et al	
			Group Art Unit		
			Examiner Name		
Sheet	2	of	2	Attorney Docket Number	3522.26

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		PAYTON R. LEWIS, "New Tooling Takes a Beating, Transfer Heating", <i>Injection Molding</i> , May 2002, 51-52, United States	
		PAYTON R. LEWIS, "Composite Metal Technology" Technical Paper, presented in Chicago, Illinois, at Regional Technical Conference of the Society of Plastic Engineers, March 20, 2002	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.